

**Cleco®**

## R1B SERIES RAMMERS



R1	B	-	XX
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Series: \_\_\_\_\_  
R1

Type: \_\_\_\_\_  
B      Bench

Terminations: \_\_\_\_\_

- |    |  |
|----|--|
| P1 | Pein for R0B, R1B & R1F Models Only                      |
| B1 | Butt Polyurethane 2 3/8 for R0B, R1B & R1F Models Only   |
| B2 | Butt Polyurethane 3 3/8 for R0B, R1B & R1F Models Only   |
| M1 | Butt Malleable Iron 2 3/8 for R0B, R1B & R1F Models Only |

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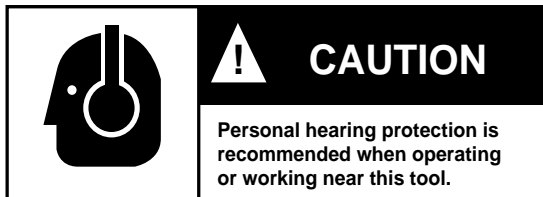
# Safety Recommendations

For your safety and the safety of others, read and understand the safety recommendations before operating any percussion tool.

**Always wear protective equipment and clothing.**



For additional information on eye protection, refer to Federal OSHA Regulations, 29 CFR, Section 1910.133, Eye and Face Protection, and ANSI Z87.1, Occupational and Educational Eye and Face Protection. This standard is available from the American National Standards Institute, Inc., 11 West 42nd, New York, NY 10036.



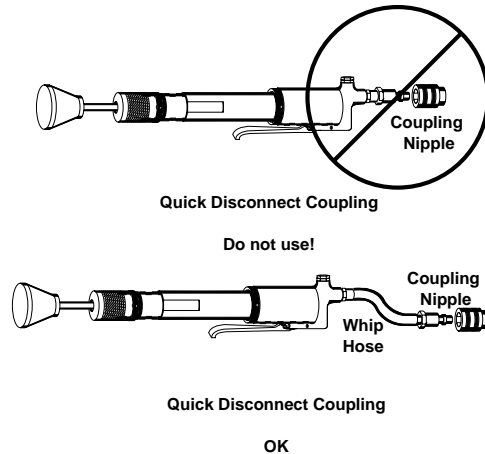
Hearing protection is recommended in high noise areas (above 85 dBA). Close proximity of additional tools, reflective surfaces, process noises, and resonant structures can substantially contribute to the sound level experienced by the operator. For additional information on hearing protection, refer to Federal OSHA Regulations, 29 CFR, Section 1910.95, Occupational Noise Exposure, and American National Standards Institute, ANSI S12.6, Hearing Protectors.

**Gloves and other protective clothing should be worn as required.** Properly fitted gloves cushion vibration and protect the fingers from pinching, scuffing and scraping.

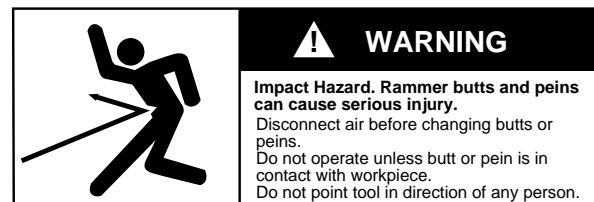


Cleco percussion tools are designed to operate on 90 psig (6.2 bar) maximum air pressure. Excessive air pressure can damage the plunger and increases sound levels. Installation of a filter-regulator-lubricator in the air supply line ahead of the tool is highly recommended. Before the tool is connected to the air supply, check the throttle for proper operation (i.e., throttle moves freely and returns to closed position). Being careful not

to endanger adjacent personnel, clear the air hose of accumulated dust and moisture. Attachment of a quick-disconnect air coupling directly to the inlet threads of a percussion tool can cause wear and failure of the coupling. Should the coupling fail, severe injury can result from the hose end violently whipping about. If a quick-disconnect air coupling is used, separate the coupling from the tool with a whip hose (1.5 feet minimum). Only use a whip hose with fittings of hardened steel or other material which is at least comparably resistant to shock. Do not use hose to lift or lower tool.

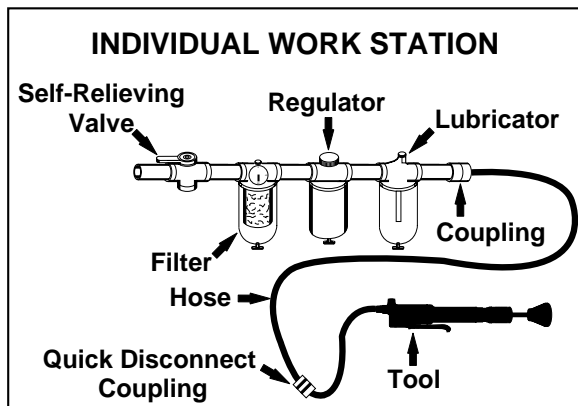


Visually inspect the rammer butt or pein for damage. Discard any butt or pein that show any damage such as cracking or splitting.





Before removing a tool from service, after completing a job, or changing chisels or other bits, make sure the air line is shut off and drained of air. This will prevent the tool from operating if the throttle is accidentally engaged. Use of a self-relieving valve within reach of the user of the tool is highly recommended.

# Safety Recommendations

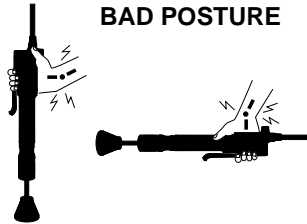


Do not operate or trigger any rammer unless the butt or pein is on the tool and in contact with the workpiece or worksurface. Never point any rammer in the direction of another person or yourself. Failure to do so can cause serious injury.

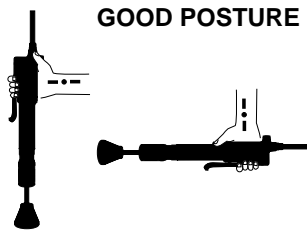
	<b>WARNING</b>
	
<b>Repetitive work motions and/or vibration may cause injury to hands and arms.</b> Use minimum hand grip force. Keep body and hands warm and dry. Avoid anything that inhibits blood circulation. Avoid continuous vibration exposure. Keep wrists straight. Avoid repeated bending of wrists and hands.	

Some individuals may be susceptible to disorders of the hands and arms when performing tasks consisting of highly repetitive motions and/or exposure to extended vibration. Cumulative trauma disorders such as carpal tunnel syndrome and tendonitis can be caused or aggravated by repetitious, forceful exertions of the hands and arms. Vibration may contribute to a condition called Raynaud's Syndrome. These disorders develop gradually over periods of weeks, months, and years. It is presently unknown to what extent exposure to vibrations or repetitive motions may contribute to the disorders. Hereditary factors, vasculatory or circulatory problems, exposure to cold and dampness, diet, smoking and work practices are thought to contribute to the conditions. Any user suffering prolonged symptoms of tingling, numbness, blanching of fingers, clumsiness or weakened grip, nocturnal pain in the hand, or any other disorder of the shoulders, arms, wrists, or fingers is advised to consult a physician. If it is determined that the symptoms are job related or aggravated by movements and postures dictated by the job design, it may be necessary for the employer to take steps to prevent further occurrences. These steps might include, but are not limited to, repositioning the workpiece or redesigning the workstation, reassigning workers to other jobs, rotating jobs, changing work pace, and/or changing the type of tool used so as to minimize stress on the operator. Some tasks may require more than one type of tool to obtain the optimum operator/tool/task relationship.

**BAD POSTURE**



**GOOD POSTURE**



- Tasks should be performed in such a manner that the wrists are maintained in a neutral position, which is not flexed, hyperextended, or turned side to side.
- Stressful postures should be avoided. Select a tool appropriate for the job and work location.

Work gloves with vibration reducing liners and wrist supports are available from some manufacturers of industrial work gloves. Tool wraps and grips are also available from a number of different manufacturers. These gloves, wraps, and wrist supports are designed to reduce and moderate the effects of extended vibration exposure and repetitive wrist trauma. Since they vary widely in design, material, thickness, vibration reduction, and wrist support qualities, it is recommended that the glove, tool wrap, or wrist support manufacturer be consulted for items designed for your specific application. **Proper fit of gloves is important. Improperly fitted gloves may restrict blood flow to the fingers and can substantially reduce grip strength.**

This information is a compilation of general safety practices obtained from various sources available at the date of production. However, our company does not represent that every acceptable safety practice is considered herein, or that abnormal or unusual circumstances may not warrant or require additional procedures. Your work may require additional specific safety procedures. Follow these procedures as required by your company. For more information, see the latest edition of ANSI B186.1, Safety Code for Portable Air Tools, available from the American National Standards Institute, Inc., 11 West 42nd, New York, NY 10036.

## **WARNING**

Eye protection must be worn when disassembling tool or when air line is turned on. A self-relieving valve in close proximity to the repair station to bleed off air is recommended.

## **OPERATING INSTRUCTIONS**

The CLECO R1B Bench Rammer is designed to operate on 90 psig air pressure using a 5/16" I.D. hose up to 8' in length. If additional length is required, a 3/8" I.D. or larger hose should be connected to the 5/16" hose.

The air hose should be cleared of accumulated dirt and moisture, then one-half (1/2) teaspoon of 10W machine oil should be poured into the tool's air inlet before connecting the hose to the tool.

**Important:** The handle should be checked after the first eight hours of operation and occasionally thereafter to make sure it is tight.

### **LUBRICATION**

An automatic in-line filter-regulator-lubricator is recommended as it increases tool life and keeps the tool in sustained operation. The in-line lubricator should be regularly checked and filled with a good grade of 10W machine oil. Never

use a heavy oil, as this will cause a loss of efficiency.

If the operation of the scaler becomes sluggish or erratic, pour one teaspoon of kerosene into the air inlet and operate the tool for a few seconds. Lubricate the tool as explained above after flushing.

### **STORAGE**

In the event that it becomes necessary to store the tool for an extended period of time (overnight, weekend, etc.), it should receive a generous amount of lubrication at that time and again when returned to service. Store the tool in a clean and dry environment. Alternatively, tools may be put in a bucket of kerosene or light oil for extended periods of storage such as weekends or plant shutdowns. The tool should always be lubricated before storage and when being returned to service.

## **WARNING**

**Eye protection must be worn when disassembling tool or when air line is turned on. A self-relieving valve in close proximity to the repair station to bleed off air is recommended.**

## **SERVICE INSTRUCTIONS**

### **DISASSEMBLY**

To disassemble the tool remove the butt from the piston rod. Turn lock nut, No. 832853, toward the backhead end of the barrel until locking key, No. 832233, has disengaged the packing gland nut, No. 832877. The packing gland nut may be removed by turning it in a counter-clockwise direction which will permit the removal of the packing gland nut seal, No. 832928. The packing assembly consisting of packing, No. 831284, packing washer, No. 832893, and packing gland may be removed from the barrel by pulling the piston toward the packing end. As the piston comes out of the barrel the packing assembly will be pulled out ahead of it.

Place the flats of the barrel in a vise with backhead, No. 832815, upward and remove locking collar, No. 832831. This will allow the removal of the backhead from the barrel. After the backhead has been removed, place the piston back in the barrel and push it toward the valve end of the barrel to drive out the valve assembly consisting of valve block, No. 832504, valve, No. 832194, and valve block cap, No. 833247. The valve assembly must be separated to inspect the valve.

If the internal parts of the tool show a lack of lubrication and the oil reservoir is still full of oil, it is evident that oilite bushing, No. 833590, has become clogged with dirt. The bushing should be drilled out and a new bushing inserted. Before inserting the new oilite bushing, place the oil reservoir under light air pressure. If the air does not blow through the small hole in oil reservoir plate, No. 833262, the hole should be cleaned out with a small rod.

To disassemble the throttle valve, remove throttle valve casing cap, No. 832644, and

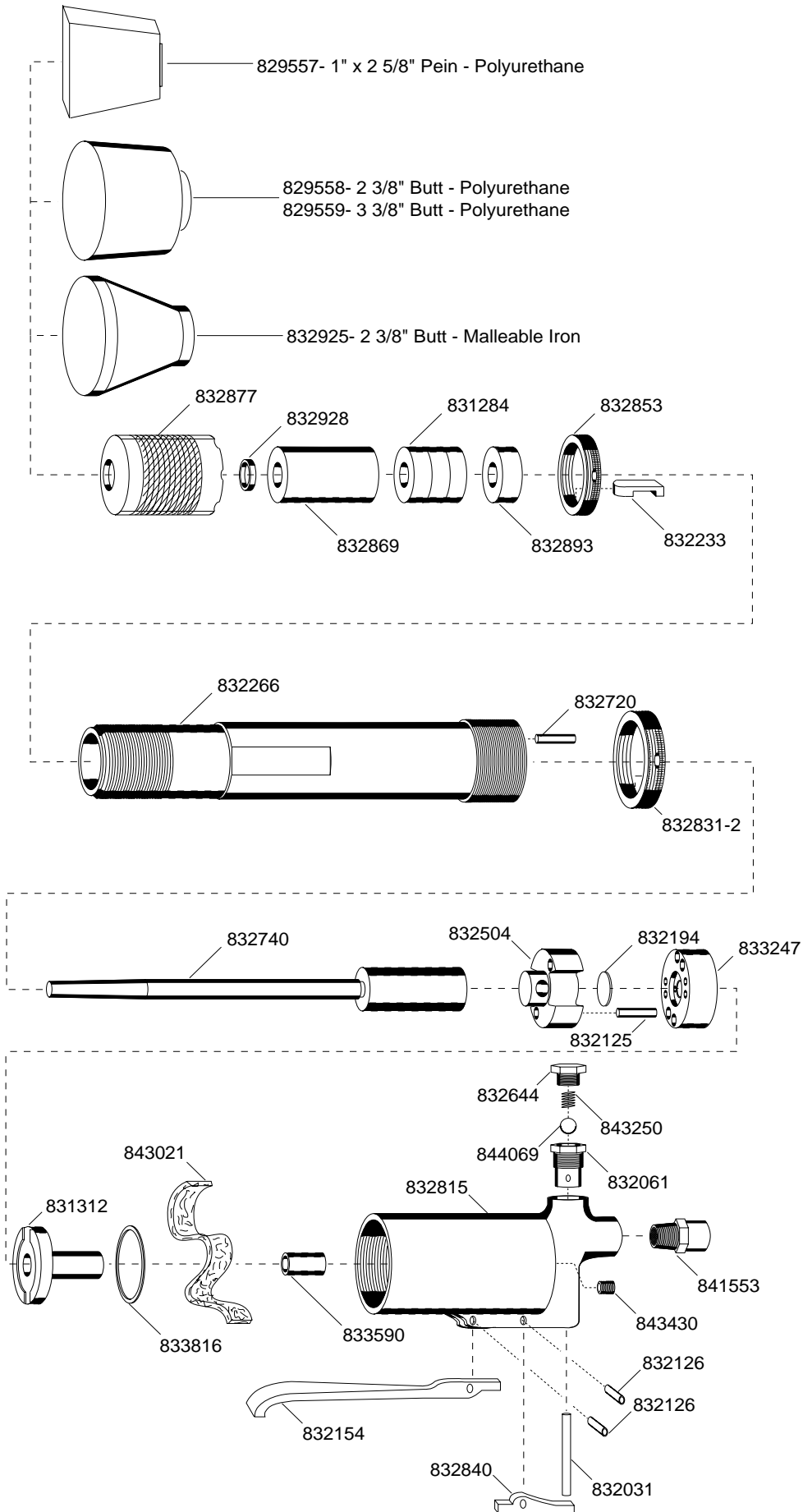
allow throttle valve spring, No. 843250, and throttle valve, No. 844069, to drop out. If the throttle valve leaks, it should be replaced. If it should be necessary to replace throttle valve casing, No. 832061, the throttle valve will have to be resealed to the new casing. This may be done by dropping the throttle valve against the seat and tapping it with a brass rod to form a good seat.

Remove inlet bushing, No. 841553, and wash in kerosene. Blow air through it in reverse of normal air flow to remove any foreign matter that may be lodged in the screen. If the screen is torn or damaged, inlet bushing, No. 841553, should be replaced.

### **REASSEMBLY**

The tool is reassembled in the reverse order in which it was disassembled. Wash all parts thoroughly in kerosene before reassembling. Be sure that all air passages in the barrel and valve assembly are free of any dirt or foreign matter. The packing gland nut seal, No. 832928, is installed in the packing gland nut with the lip or slot toward the butt. When reassembling the packing, tighten the packing gland nut down until a drag is felt on the piston rod when the piston is moved up and down in the barrel. After reassembly, place a few drops of 10W machine oil in inlet bushing, No. 841553, before attaching the air hose. This will insure immediate lubrication of all parts as soon as the air is applied. If the barrel has been honed to accept an oversize piston, it is imperative that the corresponding oversize valve block be used. The valve block must be a press fit in the barrel to ensure correct operation of the tool. The backhead should be checked after the first eight hours of operation and occasionally thereafter to make sure it is tight.

# R1B BENCH RAMMER



## PART LIST — R1B BENCH RAMMER

PART NO.	NAME OF PART	QTY.
831284	Packing Set	1
832031	Throttle Valve Pin	1
832061	Throttle Valve Casing	1
832125	Dowell Pin	1
832126	Throttle Valve Lever & Toggle Retainer Pin	2
832154	Throttle Valve Lever	1
832194	Valve	1
832233	Locking Key	1
832266	Barrel	1
832504	Valve Block	1
832644	Throttle Valve Cap	1
832720	Dowell Pin	1
832740	Piston	1
832815	Backhead	1
832831	Locking Collar	1
832840	Throttle Valve Lever Toggle	1
832853	Packing Gland Lock Nut	1
832869	Packing Gland	1
832877	Packing Gland Nut	1
832893	Rear Packing Washer	1
832928	Packing Gland Nut Seal	1
833247	Valve Block Cap	1
833262	Oil Reservoir Plate	1
833590	Oilite Bushing	1
833816	Gasket	1
841553	Inlet Bushing	1
843021	Oiler Felt	6
843250	Throttle Valve Spring	1
843430	Oil Plug	1
844069	Throttle Valve Ball	1

### SUBASSEMBLIES

831105 — Valve Block (832125, 832194, 832504, 833247)

831228 — Backhead (831312, 832031, 832061, 832126, 832154, 832644, 831228, 832840, 833176,  
841553, 843021, 843250, 843430, 844069)

831310 — Oil Reservoir Plate (833262, 833590)

### OPTIONAL PARTS

832925 — 2 3/8" Malleable Iron Butt

829558 — 2 3/8" Polyurethane Butt

829559 — 3 3/8" Polyurethane Butt

829557 — 1" x 2 5/8" Polyurethane Pein

OVERSIZE REPLACEMENT PARTS		
OVERSIZE	PISTON	VALVE BLOCK
.001"	834160	
.002"	834170	834844
.003"	834162	
.004"	834172	834845
.006"	834174	834846
.008"	834176	834847
.010"	834166	833499



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